

Amendments to Claims

1. (Currently Amended) An apparatus for winding at least one web on a winding roll comprising at least a first roll, a second roll ~~4~~ and a third roll parallel to one another and to said winding roll, said apparatus having a nominal winding position in which: said first and second rolls and said winding roll are each in contact with said third roll; there is no contact between said first roll and said second roll, between said first roll and said winding roll and between said second roll and said winding roll; a first angle defined between a first half-plane delimited by the axis of said third roll and comprising the axis of said first roll and a second half-plane delimited by the axis of said third roll and comprising the axis of said second roll is smaller than 180°; a second angle defined between a third half-plane delimited by the axis of said third roll and comprising the axis of said winding roll and a fourth half-plane delimited by the axis of said third roll and comprising an intersection line is greater than 90°, said intersection line being defined as the intersection between the bisector plane of said first angle and the plane comprising the axis of said first roll and the axis of said second roll; and the apparatus further comprises means for causing said third roll to position and align freely between said first and second rolls and said winding roll when said apparatus is in said nominal winding position.

2. (Previously Presented) The apparatus according to claim 1, wherein said first, second and third rolls and said winding roll have each bearings and said apparatus has further an open position in which said first, second and third rolls are located out of the path of said web in course of winding on said winding roll the bearings of at least one roll among said first, second and third rolls and said winding roll being movable to enable the change of position from said apparatus between said open position and said nominal winding position.

3. (Cancelled).

4. (Previously Presented) The apparatus according to claim 1, in said nominal winding position, said second angle is substantially 180°.

5. (Previously Presented) The apparatus according to claim 1, wherein, in said nominal winding position, said third half-plane is substantially vertical.

6. (Previously Presented) The apparatus according to claim 1, wherein said third roll has bearings and loading means apply forces on the bearings of said third roll so that the end regions of said third roll abut said first and second rolls for any width of said winding roll when said apparatus is in said nominal winding position.

7. (Previously Presented) The apparatus according to claim 1, wherein said first, second and third rolls and said winding roll have each bearings, the apparatus further comprising means for moving the bearings of said first, second and third rolls along a common direction not perpendicular to said third half-plane, in order to adapt to the diameter of said winding roll when said apparatus is in said nominal winding position, the bearings of said winding roll being held fixed in said nominal winding position.

8. (Previously Presented) The apparatus according to claim 7, comprising interlocking means for selectively interlocking the bearings of said first and second rolls so that said first and second rolls are not free to move with respect to each other but together.

9. (Previously Presented) The apparatus according to claim 7, comprising loading means for acting on the bearings of said first and second rolls with a force having a component parallel to said third half-plane and directed towards said winding roll in order to press said third roll against said winding roll when said apparatus is in said nominal winding position.

10. (Currently Amended) The apparatus according to ~~any one of~~ claim 7, in wherein, in said nominal winding position, the axis of said third roll is located at a higher level than the axis of said winding roll and that the weight of said first, second and third rolls is at least partly supported by said winding roll via said third roll whereby said third roll exerts a pressure on said winding roll.

11. (Previously Presented) The apparatus according to claim 10, comprising loading means for acting on the bearings of said first and second rolls with a force having a component parallel to said third half-plane and directed away from said winding roll so that only a part of the weight of said first and second rolls is supported by said winding roll when said apparatus is in said nominal winding position.

12. (Previously Presented) The apparatus according to claim 10, comprising loading means for acting on the bearings of said first and second rolls with a force having a component parallel to said third half-plane and directed away from said winding roll so that the pressure applied by third roll on winding roll is maximal in the middle region of said winding roll and diminishes progressively towards its edges when said apparatus is in said nominal winding position.

13. (Previously Presented) The apparatus according to claim 1, wherein said first and second rolls and said winding roll have each bearings, the apparatus further comprising means for moving the bearings of said winding roll along a common direction not perpendicular to said third half-plane and preferably parallel to said third half-plane, in order to adapt to the diameter of said winding roll when said apparatus is in said nominal winding position, the bearings of said first and second rolls being held fixed in said nominal winding position.

14-16 (Cancelled).

17. (Previously Presented) The apparatus according to claim 1, wherein for each roll among said first and second rolls coming in contact with said web it comprises means for selectively causing said roll either to rotate in a direction and at a tangential speed substantially corresponding to those of said web (1), or to act as an idle roll.

18. (Previously Presented) The apparatus according to claim 1, comprising means for selectively causing at least said first or second roll either to act as an idle roll, or to rotate in a direction and at a speed whereby, when said third roll is in direct contact with said first or second roll, said third roll is driven in rotation by friction in a direction and at a tangential speed substantially corresponding to those of said web (1).

19. (Previously Presented) The apparatus according to claim 1, comprising means for causing said third roll to run along the circumference of said second roll until said third roll abuts also said first roll.

20 to 42. (Cancelled).

43. (Previously Presented) The apparatus according to claim 1, wherein the diameter of said first and second rolls is one to six times the diameter of said third roll.

44. (Previously Presented) The apparatus according to claim 43, wherein said first and second rolls have the same diameter.

45. (Previously Presented) The apparatus according to claim 44, wherein said first and second rolls have the same weight.

46. (Previously Presented) The apparatus according to claim 43, wherein, in said nominal winding position, said second angle is substantially 180° and said third half-plane is substantially vertical.

47. (Previously Presented) The apparatus according to claim 46, wherein said first and second rolls have the same diameter.

48. (Previously Presented) The apparatus according to claim 47, wherein said first and second rolls have the same weight.

49. (Previously Presented) A method for winding at least one web on a winding roll, using an apparatus according to claim 2, comprising the step of

- (i) causing said apparatus to adopt said open position;
- (ii) initiating the winding of said web on said winding roll;
- (iii) bringing said winding roll and said first, second and third rolls nearer until they adopt said nominal winding position.

50. (Previously Presented) A method according to claim 49, wherein step (iii) comprises:

- causing each roll among said first and second rolls coming into contact with said web, to rotate before contacting said web in the direction and at a tangential speed corresponding substantially to those of said web.

51. (Previously Presented) A method according to claim 50, wherein step (iii) comprises:

- causing said first roll and said second roll to act as an idle roll before said third roll and said winding roll come into contact.

52. (Previously Presented) A method for winding at least one web on a winding roll, using an apparatus according to claim 2, comprising the steps of:

- (i) causing said apparatus to adopt said open position in which said first, second and third rolls are located at one side of the path of said web towards said winding roll
- (ii) initiating the winding of said web on said winding roll;
- (iii) bringing said winding roll and said first, second and third rolls nearer until they adopt said nominal winding position in which said web passes between said third roll and said winding roll, but neither between said second and third rolls, nor between said first and third rolls.

53. (Previously Presented) A method for winding at least one web on a winding roll, using an apparatus according to claim 2, comprising the steps of:

- (i) causing said apparatus to adopt said open position in which said first and second rolls are located at one side of the path of said web towards said winding roll and said third roll is located on the other side of the path of said web towards said winding roll
- (ii) initiating the winding of said web on said winding roll;
- (iii) bringing said winding roll and said first, second and third rolls nearer until they adopt said nominal winding position in which said web passes between said second and third rolls, then between said first and third rolls and finally between said third roll and said winding roll.

54. (Previously Presented) A method for winding at least one web on a winding roll, using an apparatus according to claim 2, comprising the steps of:

- (i) causing said apparatus to adopt said open position in which said first roll is located on one side of the path of said web towards said winding roll and said second and third rolls are located on the other side of the path of said web towards said winding roll;
- (ii) initiating the winding of said web on said winding roll;
- (iii) bringing said winding roll and said first, second and third rolls nearer until they adopt said nominal winding position in which said web passes between said first and third rolls and then between said third roll and said winding roll, but not between said second roll and said third roll.

55. (Previously Presented) A method according to claim 54, wherein step (iii) comprises the two substeps of:

- (a) bringing said first, second and third rolls nearer until a predetermined configuration in which said third roll is in contact with said first roll and said second roll, said third roll not being in contact with said winding roll; and

(b) bringing said winding roll and a unit formed by said first, second and third rolls in said predetermined configuration nearer until said third roll is in contact with said winding roll.

56. (Previously Presented) The method according to claim 55, wherein substep (a) comprises the two substeps of :

(aa) bringing said first, second and third rolls nearer until another predetermined configuration in which said first roll and said second roll are spaced of a predetermined distance and said third roll is not in contact with said first roll ; and

(bb) bringing said third roll nearer said first and second rolls until said third roll is in contact with said first and second rolls.

57. (Previously Presented) The method according to claim 56, wherein substep (bb) comprises the substep of:

- causing said second roll to rotate and said third roll to run along the circumference of said second roll wherein said second roll causes said third roll to rotate by friction driving in the direction and at a tangential speed corresponding substantially to those of said web.

58. (Previously Presented) An apparatus for winding at least one web, on a winding roll, comprising at least a first roll, a second roll and a third roll parallel to one another and to said winding roll, the diameter of said first and second rolls being one to six times the diameter of said third roll and said apparatus having a nominal winding position in which:

- said first and second rolls and said winding roll are each in contact with said third roll;
- there is no contact between said first roll and said second roll, between said first roll and said winding roll and between said second roll and said winding roll;
- a first angle defined between a first half-plane delimited by the axis of said third roll and comprising the axis of said first roll and a second half-plane delimited by the axis of said third roll and comprising the axis of said second roll is smaller than 180° ; and
- a second angle defined between a third half-plane delimited by the axis of said third roll and comprising the axis of said winding roll and a fourth half-plane delimited by the axis of said third roll and comprising an intersection line is

greater than 90°, said intersection line being defined as the intersection between the bisector plane of said first angle and the plane comprising the axis of said first roll and the axis of said second roll.

59. (Previously Presented) The apparatus according to claim 58, wherein said first and second rolls have the same diameter.